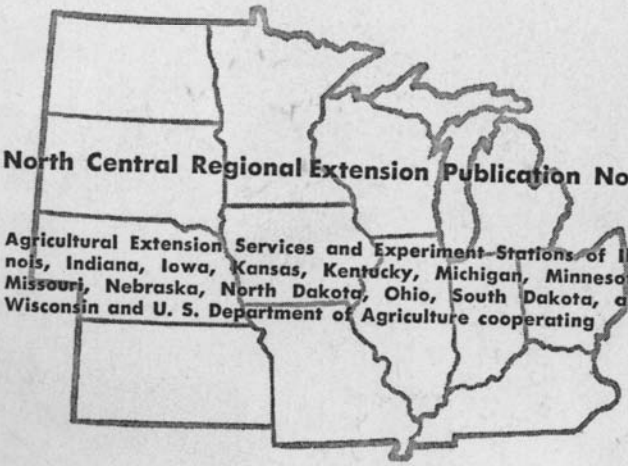
# *Getting Started and Established in Farming*

## WITH AND WITHOUT FAMILY HELP



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## FOREWORD

This publication is designed to help farm boys and young men who are looking forward to careers as farm operators, as well as their parents, county agents, vocational agriculture teachers, and others who advise and counsel them. It should also be of interest to the girls and young women who are or may become wives of these young men and will share their success or failure. The possibility of success in such a career needs to be evaluated early enough by the boys and their parents so that the boys can select their courses in high school to best prepare for farming, off-farm employment, or college or university training.

Some experiences and problems of young families who made a start in farming during the post-World War II period, roughly from 1946 through 1952, are reported. These were collected from samples of beginning farmers, or individual case histories of beginning farmers, who started farming in those years. The samples studied were drawn under state contributing projects to regional research project NC-15, "How Young Families Get Established in Farming — With Special Reference to Those Without Substantial Family Assistance." The case histories were selected by state research personnel. Each of the thirteen cooperating states is represented in the samples or the case histories. Because of constantly changing conditions, the experiences and data reported should be taken as illustrating principles rather than as absolute guides in the requirements for starting in farming.

## CONTENTS

# GETTING STARTED AND ESTABLISHED IN FARMING

THE CONDITIONS UNDER WHICH YOUNG PEOPLE ENTER FARMING and the adequacy with which they make their start will largely determine the degree of success they will attain. The kind of start they make can also determine whether their beginning farm operations will lead to establishment on efficient family-size farms or will lead to years of economic sacrifice on units that are too small or inadequate in other respects.

This publication sets forth the requirements for successful establishment in farming today. With such information young people will be in a better position to evaluate their chances of attaining a successful career in farming.

## THE PROBLEM

There are no legal obstacles to becoming a farmer. Anyone who wishes may try. Substantial barriers to an otherwise free entry into farming do exist, however. Farming requires land, machinery, equipment, livestock, and other capital requirements, plus managerial ability to put them together into an efficient and profitable operating unit. The following discussion will examine these requirements.

**Larger and fewer farms.** The number of farms and therefore the number of opportunities in farming are limited by the available area of suitable farmland. Nearly all farmland in the North Central Region has already been included in farming units, so except for reclamation and development projects, the only way to increase the number of farming opportunities in the region is to decrease the average size of farms. But the trend is actually in the opposite direction — toward larger and fewer farms. Beginning farmers must compete not only with operators on these growing farms but with one another for land and capital with which either to make a start or with which to enlarge their farms to efficient units of operation.[1]

Along with the increase in size of farm and the decrease in number of farms, more and more farmland is being appropriated for highways, factory sites, airports, expansion of residential areas, and other nonagricultural uses.

[1] For more details on this point, see "Opportunities for Beginning Farmers — Why Are They Limited?" by Don Kanel. Published as North Central Regional Publication 102 (Nebraska Agricultural Experiment Station Bulletin 452), 1960.

In the North Central states and Kentucky in 1940, there were about 2.3 million farms.[1] By 1954 this number had decreased to a little less than 1.9 million, an annual decrease of about 30,000, or 1.6 percent. The change that has occurred is shown by the following figures:

| | *1940* | *1954* | *Percent of change* |
|---|---|---|---|
| Number of farms | 2,349,563 | 1,897,425 | −19.2 |
| Acres of land in farms | 408,492,947 | 411,492,261 | +.7 |
| Average acres per farm | 174 | 217 | +24.7 |

How many opportunities for starting in farming would normally occur each year among these farms? If we assume that the number of farms will remain constant and that the average farm operator will remain active for 40 years, in order to replace all farm operators in 40 years at a constant annual rate, we would need to replace 2.5 percent of the initial operators each year. Two and one-half percent of about 1.9 million farms would be a little over 47,000 farms.

With no change in numbers of farms, we might thus expect about 47,000 young farmers to get started in farming in these 13 states every year. We have already noted, however, that about 30,000 of these farms have been disappearing each year. If this shrinkage in number of farms continues for the next several years and is accounted for entirely by a reduction in the number of young farmers getting started, then we could expect only about 17,000 to get started — 47,000 minus 30,000 — or a replacement rate of a little less than 1 percent annually. This estimate, however, is too low. As fewer young people get started in farming, the proportion of farm operators reaching retirement age increases. Instead of 2.5 percent retiring every year we may have 3 percent or more. The number of young people starting in farming each year is thus more likely to be 1.5 percent or more of the total number of farm operators.

**Higher capital requirements.** As a rule, beginning farmers are short on capital, particularly those who are making a start without a substantial amount of family help. A beginning farmer is looking for an opportunity that will make the most efficient use of his labor when combined with his limited capital. He is looking for a job as a farm operator through which he can market his labor and from which he

[1] A "farm," as defined by the census, includes "places of three or more acres . . . if the annual value of agricultural products, exclusive of home-garden products, amounted to $150 or more." Places of three acres or producing only $150 value of products would hardly be considered a farming opportunity to someone looking for full-time employment.

can get a return in proportion to the value of that labor at full-time employment. This is quite different from just keeping busy. One man might find enough to do on an 80-acre grain farm without much livestock to keep him busy the year around, particularly if he did many jobs by hand instead of by power. However, his pay, or his return, from such a job is based, not on the amount of time he spends at it, but on the amount of product he is able to produce and market.

The real questions are: (1) how much land is required to provide full and efficient employment for at least one man's labor, and (2) how much capital must be invested in machinery, equipment, and improvements to make such an operation efficient?

The size of farm that can effectively provide full-time employment for at least one man's labor will vary with: (1) the type of farming; (2) the topography and productivity of the land; and (3) the relative intensity of the cropping system on such land. For example, a one-man wheat farm in North Dakota or South Dakota will contain a much larger acreage than a one-man cash-grain farm in eastern Illinois, and a one-man dairy farm will contain a smaller acreage than a one-man cash-grain farm. Table 1 shows how farms vary in size with selected locations and types of farming in the North Central Region and Kentucky and how size will vary when the labor input is held constant at a one-man level.

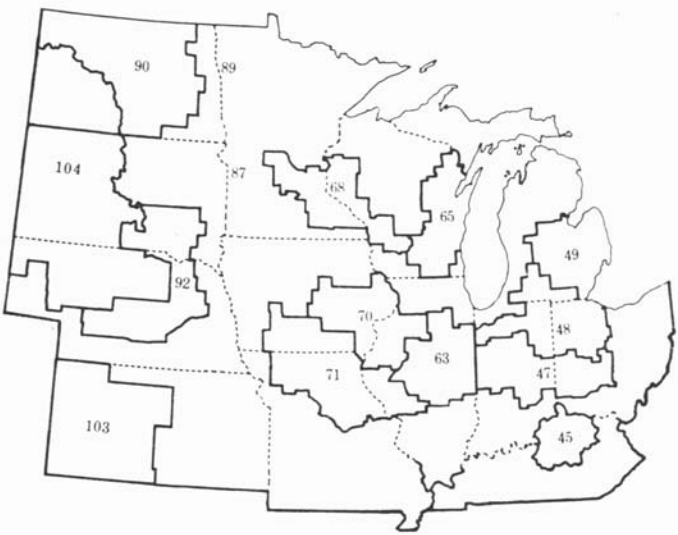
In 1956, the average of all one-man tenant operations (197 farms) under crop-share leases on Illinois account-keeping farms on the best land consisted of 216 acres. Of this acreage, 200 acres were tillable, with 122 acres in corn and soybeans, 45 in small grains or other crops, and 30 in tillable hay and pasture. The average operator of these farms kept 17 animal-units of cattle and sheep and raised 17 litters of pigs. Average total value of farm production on these farms was $19,440 and average months of labor 12.7. Another group (89) of one-man farms, but on poorer soils and rented under livestock-share leases, averaged 203 acres, of which 171 were tillable. A less intensive cropping system and larger livestock enterprises on these farms than on the farms in the other group brought the average total value of farm production to $16,736 at 1956 prices.

The average tenant investment from both owned and borrowed funds for both of these one-man groups was about $15,000. Of this amount, about $6,500 represented the tenant's investment in machinery and equipment at used-machinery prices. The average January 1 inventory of livestock accounted for about $4,000, and feed and grain inventory accounted for the remaining $4,500. A man can make a

**Table 1. — Average Size of Farm and Estimated Size of One-Man Farms for Particular Types and Locations[a]**

| State | Economic subregion (see Fig. 1) | Major type and average size of commercial farms in 1954[b] | | Size of farm required to provide full employment for one man, assuming an average volume of livestock[c] | |
|---|---|---|---|---|---|
| | | Type | Acres | Total acres | Acres of cropland |
| Illinois | 63 | Cash-grain | 231 | 200–230 | 190–210 |
| Indiana | 47 | Livestock | 168 | 160–220 | 160–220 |
| Iowa | 70 | Livestock | 194 | No estimate | |
| Kansas | 103 | Cash-grain | 820 | 800–960 | 540–640 |
| Kentucky | 45 | Tobacco-livestock | 129 | 100–150 | 80–120 |
| Michigan | 49 | Dairy | 154 | 160–180 | 125–150 |
| Minnesota | 68 | Dairy | 163 | No estimate | |
| Missouri | 71 | Livestock | 228 | Indefinite | 190–220 |
| Nebraska | 92 | Livestock | 477 | 380–420 | 190–210 |
| North Dakota | 90 | Cash-grain | 696 | 640 | 480–500 |
| Ohio | 48 | Cash-grain | 158 | 200–225 | 190–210 |
| South Dakota | 104 | Cattle and sheep ranching | 3,210 | 1280–6000 | Indefinite |
| Wisconsin | 65 | Dairy | 136 | 160–200 | 90–120 |

[a] Census of Agriculture, 1954. See also Fig. 1.
[b] Commercial farms are defined in the Census as those with a total value of all farm products sold of $1,200 or more per farm, plus those with the value of all farm products sold in the range of $250 to $1,199, provided the farm operator worked off the farm less than 100 days, or provided the income of the farm operator and members of his family received from nonfarm sources was less than the value of all farm products sold.
[c] Based on estimates by state research and extension workers.




Selected economic subregions (see also Table 1). (Fig. 1)

start in farming without such an inventory, but the final capital requirements will not be greatly different for two reasons. First, living expenses, and seed, fuel, and feed costs occur before a crop can be harvested to provide income for such needs; and second, accumulating such an inventory entirely from current income increases the credit problems during this period.

For the period 1950 to 1956 in the northern two-thirds of Illinois, a tenant's labor and management earnings ranged in group averages from $17 to $25 per acre. This range was due primarily to differences in size of farm, volume of livestock, and productivity of the soil. Within groups, earnings ranged widely with differences in management. These group averages afford a basis for estimating the size of farm needed to yield desired income levels. At $20 an acre, a 160-acre farm would yield tenant earnings of $3,200. Estimates of the resources needed to yield two levels of operator earnings in two selected areas in Kansas and Wisconsin are given in Table 2. Note that the dairy farms use only about a third as much real estate capital but nearly twice as much labor to produce the same operator's earnings as do the wheat-

**Table 2. — Estimates of Land, Capital, and Labor Resources Needed to Obtain Operator's Earnings of $2,500 and $3,500 From Farming in Two Selected Areas[a]**

| Resources needed | Dairy farms, eastern Wisconsin | | Wheat-beef farms, central plains, Kansas | |
|---|---|---|---|---|
| | $2,500 Operator's earnings | $3,500 Operator's earnings | $2,500 Operator's earnings | $3,500 Operator's earnings |
| All land, acres | 160 | 200 | 720 | 960 |
| Cropland, acres | 90 | 120 | 581 | 733 |
| Capital investment | | | | |
| Land | $ 4,900 | $ 6,350 | $56,490 | $ 72,970 |
| Building | 16,860 | 20,460 | 7,645 | 8,930 |
| Total real estate | $21,760 | $26,810 | $64,135 | $ 81,900 |
| Machinery and equipment | 7,200 | 7,720 | 9,080 | 10,650 |
| Livestock | 7,200 | 9,360 | 6,585 | 9,480 |
| Feed inventory | 1,500 | 1,500 | 560 | 790 |
| Total nonreal estate | $15,900 | $18,580 | $16,225 | $ 20,920 |
| Total capital investment | $37,660 | $45,390 | $80,360 | $102,820 |
| Labor inputs, man-hours | | | | |
| Operator | 2,500 | 2,500 | 1,644 | 2,210 |
| Family | 690 | 1,000 | 100 | 130 |
| Hired | 140 | 820 | ..... | ..... |
| Total labor | 3,300 | 4,320 | 1,744 | 2,340 |

[a] Adapted from Farm Resources Needed for Specified Income Levels, U. S. Dept. Agr. Agr. Inform. Bul. 180, 1957.

beef farms. For a beginning farmer the important thing is getting enough land and capital for the type of farming he will do to make efficient use of his labor.

Unless a young man has accumulated through past savings, or has available through family help, an amount needed to become established in farming, he must convince creditors that he has the ability to make productive use of borrowed money. Owning, borrowing, or being responsible for managing such an investment in operating capital constitutes a very real barrier to getting started in farming.

**Management more crucial than formerly.** As the acres of land and the amount of invested capital associated with one man's labor have increased, so has the complexity of the management problem. It is not at all uncommon for a young prospective farmer to hesitate at the prospect of financing, operating, and managing a farm such as those given in Table 2 because of uncertainty about his own managerial ability.

A farm operator's need for meeting not only his cash production expenses, but also his cash family living requirements, taxes, interest, and principal payments from an uncertain and varying annual income is comparable to an employer's need for meeting a payroll. Among Illinois tenants, cash production expenses and replacement of capital items absorbed three out of every four dollars of cash income. Out of the remaining dollar, the tenant family must pay its living expenses, income and social security taxes, interest on indebtedness, and any saving through retirement of debts or otherwise.

One answer to the problem of a high level of management, even on one-man farms, is specialization in a limited number of enterprises. The time and effort required to get information concerning management decisions do not vary much with volume of production. It may, for example, take the same amount of time and effort to learn how to control certain livestock diseases in a small herd as in a larger one.

Except in major livestock and dairy areas, beginning farmers tend to start as cash-crop farmers and add livestock enterprises to their operations as their accumulation of capital and managerial experience permits. Uncertainty about their ability to make profitable use of borrowed money is more often the factor that limits the amount of capital employed by beginning farmers than the actual refusal of creditors to make capital available to them. This is not to say that beginning farmers have no credit problems. A very capable young man may have used his savings and family help to get a college education

in agriculture and still be refused credit because he does not have enough equity capital.

Technological developments are becoming available and are rapidly being applied to farm operations. The prospective farm operator having only a vocational agriculture course in high school cannot expect to be fully equipped to meet farm management problems ten years later without a continuing study of new information.

One indication of the complexity of the farm management job can be gained by considering the implication of such terms as minimum-tillage methods, high-analysis fertilizer, hybrid varieties, antibiotics, gibberellins, hormones, herbicides, pesticides and others that are just now coming out of the laboratories. What about corn combines, hay pelleting, pipe-line milkers, feed-metering and mixing, and supplemental irrigation? The manager's job is not done when he has learned about and decided how to use these methods and products on his farm. He must also raise and answer the economic questions: How much do these things cost? Will they increase net income? What size of operation do I need before these investments can be made profitable? How far can I go before my money would earn more if it were invested elsewhere? Farming is highly competitive, and economic survival of the individual farmer depends to a large degree on the operator's ability to make such decisions as these.

**Family help is important.** Family help is a major factor in the processes by which farm operatorships are transferred from one generation to another, or by which new operators become established. Most farming opportunities are preempted by persons with family ties to land.

The types of family help that were most important to beginning farmers included in regional research studies were: (1) access to land; (2) access to capital or opportunities to accumulate capital; and (3) managerial guidance and encouragement. The big problem of finding a farm was frequently solved by making a start on the home farm as a tenant, or in a father-son operating agreement. Capital assistance took many forms, including use of the father's machinery, outright cash gifts or gifts of livestock, direct loans or collateral security on loans obtained from commercial lenders, and in a few instances inheritance.

A study of 182 young farm families who began farming in Clinton county, Indiana, between 1947 and 1953 showed that nearly three-

fourths received substantial family help[1] when they started. Of those who started with family help, 80 percent leased their initial farm land from close relatives.

Similar results were obtained in a study of the post-World War II occupational experiences of 195 farm-reared boys in Michigan. In 1955, only 58 of the 195 were farming. Of these 58, 33 were farming full time, and 25 of the 33, or 76 percent, began farming on their home farms. Access to land was given as one of the difficult problems in making a start in farming. Thus the opportunity to start farming on the home farm is an item of major family assistance.

Eighty-two percent of a group of 175 beginning farmers in Missouri received substantial family assistance in making their start.

Among 145 beginning farm families in Illinois, capital assistance averaged $3,649 each. On the average, these families started farming in 1948. Gifts, including the use-value of the father's machinery, made up 18 percent of the total capital assistance. Inheritances accounted for another 18 percent. Direct loans amounted to 50 percent of the total. Co-signed notes made up the balance, 14 percent. Only 30 of the 145 who were farming in 1954 had made their start without any family assistance. Thus almost 80 percent used some type of family help.

Assistance in managerial problems is an intangible thing and cannot readily be measured. Interviews with many beginning farm families revealed that parental assistance of this type removed some of the uncertainty and hesitation in borrowing money or in entering on new enterprises on an efficient scale. In some cases, loans or labor-share lease arrangements were made contingent on parental managerial supervision of the young family's initial farming operations.

Land, machinery and equipment, livestock, and other forms of farm capital are often made available to beginning farm families at less than competitive rates. This allows the young family to use its savings as a basis for obtaining credit from commercial sources to supplement its initial capital. Direct loans from relatives may carry a low rate of interest, and may also provide operating capital on an intermediate-

[1] Substantial family assistance was defined in all state contributing projects as consisting of one or more of the following: (1) financial and managerial assistance through a father-son agreement on a volume of business large enough to efficiently employ the contributions of both father and son; (2) possession of and security of tenure on a family-type farm or larger by virtue of kinship with the owner; (3) inheritance, gifts, or concessions in money or in kind equal in value to a year or more of wages to hired labor; and (4) either direct loans or collateral security on outside loans or both in an amount equal to two years or more of wages to hired labor.

term or a no-term basis. Such terms allow a beginning farm family to apply its surplus earnings to the retirement of debts owed to commercial lenders, or to accumulate operating-capital inventories rather than liquidate such inventories for debt retirement. Under such inventory build-ups, the young family's net-worth-to-debt ratio and the safety of the loan from the creditor's point of view are actually increased, but relatively few nonfamily lenders have been willing to extend credit on such terms.

Intermediate-term credit from commercial sources to provide operating capital can replace some family help. Production credit associations, individual bankers, and other lenders are now making some intermediate-term loans to beginning farmers.

## FINDING A FARM

### Land a Key Factor

Finding an adequate farm is perhaps the most difficult problem for a young man without kinship ties to land. Land becomes available to beginning farmers at the discretion of its owners or those who control the rights of possession. Such persons may choose one of the following ways of transferring rights of possession and use to beginning farmers.

They may transfer operating rights for a limited period to a young man as a tenant or they may operate the farm jointly. If they rent the farm, they may rent it: (1) for cash, (2) for a share of the crop or for a share of the crop plus cash, or (3) for a share of the crop and livestock. If they choose to operate the farm jointly, they have a choice of four arrangements: (1) father-son agreements; (2) labor-share arrangements; (3) cropper arrangements; and (4) partnerships.

They may also transfer operating rights by transferring ownership. They may do this, too, in one of four ways: (1) by cash purchase; (2) by mortgage-secured, credit-financed purchase; (3) by land contract purchase; and (4) by gift or inheritance.

Most young farmers enter farming gradually, especially those who enjoy a substantial measure of family assistance. A young man may continue to live at home with his parents and exchange work on the father's farm for use of the father's machinery to produce a crop on individual fields or small tracts of 40 to 80 acres rented on short-term leases. Returns from such cropping enterprises may form the basis of capital savings with which full-time entry into farming is later financed. It may also serve as an exploratory period for a young man who has not fully decided to make farming his life work.

## Renting Land

Relatively few young men start farming as owners or part-owners, even where land prices are comparatively low. The great majority make their start by some kind of rental arrangement (Tables 3 and 4). Among the 175 beginning farmers in the Missouri study, 77 percent began as tenant operators or in father-son operating arrangements. In Clinton county, Indiana, 98 percent of the 182 beginning farmers also began either as tenants or under father-son agreements. At least this part of the tenure ladder appears to be still in operation. In the census year 1954, operators under 25 in the North Central Region were primarily tenants, but the proportion of tenants decreased with advances in age (Fig. 2). Among operators 65 years or more old, 80 percent were full owners and about 7 percent tenants.

**Types of leases for beginning farmers.** Among the four major types of farm leases — cash, crop-share or crop-share-cash, livestock-share, and labor-share — cash leases are least frequently used by beginning farmers. The reasons are fairly obvious. The operator's capital and managerial requirements are higher under cash leases than under any of the other leases for comparable farms and comparable volumes of business. And, perhaps most important in the minds of beginning farmers, the burden of risk is heaviest.

**Table 3. — Percent of Full-Tenant Farms Among Commercial Farms in Each of Three Age Groups, 1954 Census of Agriculture**

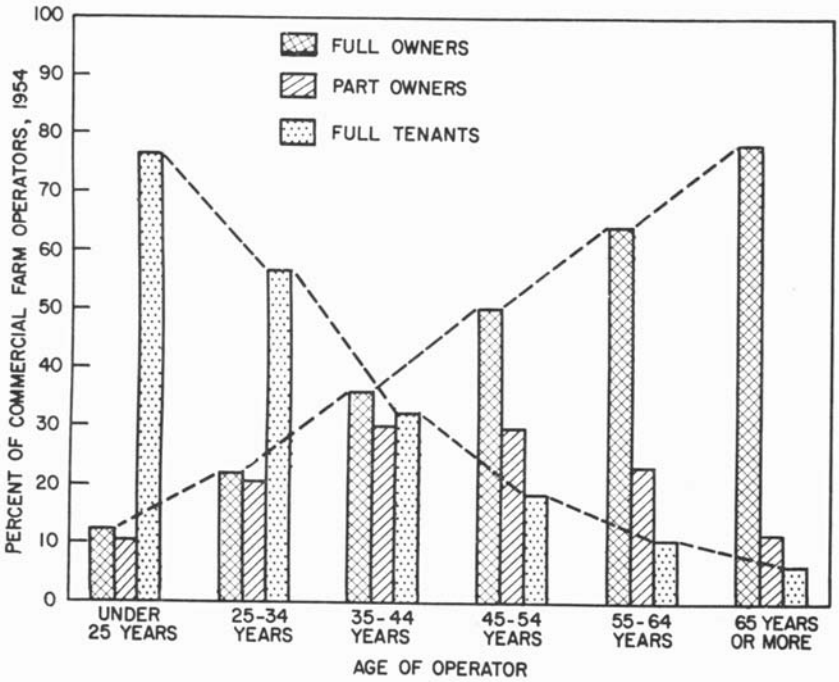
| States[a] | Percent of full tenants in each age group | | | |
|---|---|---|---|---|
| | Under 35 years | 35-54 years | 55 years and older | All ages |
| Iowa | 78 | 39 | 17 | 40 |
| Nebraska | 76 | 38 | 10 | 39 |
| Illinois | 74 | 43 | 17 | 39 |
| Kansas | 66 | 30 | 12 | 29 |
| South Dakota | 62 | 26 | 11 | 29 |
| Kentucky | 54 | 25 | 10 | 23 |
| Indiana | 56 | 24 | 8 | 22 |
| Minnesota | 51 | 19 | 6 | 20 |
| North Dakota | 49 | 16 | 6 | 20 |
| Ohio | 55 | 22 | 7 | 20 |
| Missouri | 50 | 21 | 9 | 20 |
| Wisconsin | 41 | 14 | 4 | 16 |
| Michigan | 26 | 9 | 3 | 9 |
| All 13 states | 59 | 26 | 10 | 26 |

[a] States listed by percent of tenancy among commercial farms.

Table 4. — Initial Tenure Arrangements of Beginning Farm Operators Making a Start in Farming Since 1945 in Samples From Selected States

| | Missouri | Indiana | South Dakota | Illinois |
|---|---|---|---|---|
| Number of men in sample | 175 | 182 | 28[a] | 143 |
| Percent who started as: | | | | |
| Owner-operator[b] | 16 | 2 | 4 | 8 |
| Part-owner[b] | 7 | | 4 | |
| Cash tenant | 9 | .. | .. | 1 |
| Crop-share tenant | 32 | 22 | 75 | 54 |
| Livestock-share tenant | 5 | 63[c] | .. | 3 |
| Partner in father-son agreement | 25 | 13 | 17 | 34 |
| Other | 6 | .. | .. | .. |

[a] This sample from Spink county, South Dakota, included only those who started farming in 1956.
[b] Includes any who acquired ownership through land contracts.
[c] The Indiana sample came from Clinton county, an intensive livestock-producing area in which livestock-share leases predominate.




Most of the younger operators are tenants, while most of the older ones own their farms. These data are from the 1954 Census of Agriculture for the twelve North Central states and Kentucky. (Fig. 2)

**Cash leases.** Where cash leases are used by beginning farmers, the parties to the lease are usually related. A father who wants to give his son or son-in-law the greatest amount of freedom in the operation of his beginning farm business may suggest a cash lease as the means to this end. In such situations the cash rent tends to be lower than competitive rent for farms of similar quality. The rent is often set at a level intended to approximate the living requirements of the parents rather than at a figure that would represent the competitive rental value of the farm.

On one southern Illinois farm, the farm owner and his son-in-law agreed on a cash lease in preference to a livestock-share lease because they recognized the probability of conflict between the young man, who was a college of agriculture graduate, and his father-in-law on the question of livestock management practices. A livestock-share lease would have provided the son-in-law with needed financial assistance, but loans from the father-in-law accomplished the same purpose. A partial risk-sharing was effected by using a commodity-based, standing rent under which the two parties shared the risk of price fluctuation. Risks of extreme variations in crop production were shared by means of a disaster clause in the lease. When county average yields fell below a stated percentage of a moving five-year average, the cash rent was lowered. The landowner similarly shared in bumper crops by an upward adjustment in rent.

**Crop-share[1] and crop-share-cash leases** are well adapted to the needs of many beginning farmers.[2] They are particularly appropriate for the unmarried young man who rents unimproved land. He may live at home with his parents and farm such land with his father's machinery, the use of which he may be given in exchange for his labor.

As the name implies, the rent paid to the landowner under a crop-share lease is a share of the crop, usually one-third, two-fifths, or one-half. Only the better soils of the corn belt command a one-half-share rent. By accepting a share of the crop as rent, the landowner shares in the production risk, and the young operator takes less risk than he would have to take on a cash lease. In addition to a share of the grain crops, the young tenant, however, may pay some cash rent in lieu of the landlord's share of hay or pasture crops, or as an added return to landlord for furnishing superior improvements.

[1] The term "crop-share lease" as used elsewhere in this bulletin includes crop-share-cash leases.

[2] For a discussion of farm leases and lease practices, see North Central Regional Publication 50, "Farm Rental Practices and Problems in the Midwest," Iowa Agr. Exp. Sta. Res. Bul. 416. 1954.

Under a crop-share lease, the young farmer is usually expected to furnish all labor, machinery, equipment, fuel, and repairs, and a proportionate share of such variable costs as annual fertilizers, seed, seed treatment, and insect control. The tenant also furnishes all investments in livestock enterprises since the landlord does not share in the livestock returns. Thus capital requirements under this lease arrangement may be high, but the scale of operations can be very flexible, allowing the tenant time for growth in managerial skill and accumulation of capital.

**Livestock-share leases** provide for a share of the rent on crops grown even though they are usually fed and marketed through jointly owned livestock, and a share of the returns from livestock. The landowner furnishes the farm and permanent facilities for livestock, and part of the investment in livestock, feed, and specialized livestock equipment. The tenant is usually expected to furnish all labor, the basic items of machinery and equipment, and a proportionate share in livestock and feed.

Livestock-share leases are most appropriate on complete farm units requiring a resident operator. The tenant's total investment can be substantial, but because the landlord shares in the capital investment necessary for the operation, the amount of capital the tenant needs is much less than what he would need for a similar volume of business under either a cash or crop-share lease.

**Crop-share as opposed to livestock-share leases.** Except in intensive dairy areas, there are more livestock-share leases among young than among older, established tenants. This is less true, however, among young men who start farming without substantial family assistance. Except in areas where most farms are livestock farms and where livestock-share leases predominate, this group tends to prefer crop-share leases, particularly in their first year. A tenant needs less capital under a crop-share or cash-crop lease on a grain farm than he needs under a livestock-share lease on a livestock farm of the same size. Inexperienced, beginning farmers with small amounts of equity capital are quite risk conscious; a livestock operation carries more risk than a grain operation because the added investment may mean a still lower net-worth-to-debt ratio and because a livestock operation expands the area of managerial requirements.

The key to lease preference is the amount of experience with livestock and the capital at hand. Young men who have grown up on livestock farms and who have had personal experience in managing livestock projects are prepared to start in farming with one or more

livestock enterprises. A livestock-share lease is an excellent first tenure arrangement for such young men, especially if they have enough equity capital to start as tenant operators but not enough to finance a full inventory of livestock, feed, and machinery on their first farm. Under a livestock-share lease, the landlord can contribute enough operating capital to permit a capable young farmer to use his managerial ability on a greater volume of business and thus operate more efficiently and enjoy greater returns.

Livestock-share leases offer two other possible advantages of major importance to beginning farmers. First, they offer a young man an excellent opportunity to gain experience and to learn livestock management from a landlord who is a successful livestock farmer. And second, if the landlord is a good livestock farmer, they make some lenders more willing to extend credit for buying the livestock and equipment the young farmer needs. Obviously, livestock-share leases are most appropriate on farms that require livestock for marketing the feeds and roughages necessary for a good land-use program and that already have storage for feed and other improvements for handling livestock.

**Some characteristics of rental arrangements and lease terms of particular importance to a beginning farmer.**

1. *Adequate volume of business.* A lease on a tract of land that is too small to fully utilize the available labor should permit the tenant-operator to rent additional land or to carry on outside employment. The importance of an adequate volume of business is occasionally overlooked in the development of labor-share leases or father-son operating arrangements. If the income-producing opportunities of the farm family are limited by the the size of the business to less than the desired levels, the arrangement will not be satisfactory, no matter how fairly and equitably the income may be divided. Every beginning farmer considering a rental arrangement should make a paper estimate of the expected income and expenses of an average year's operation. He can then estimate whether his share of the projected income will be satisfactory or not. He will also have a good basis for estimating what his position will be in those years when income falls below average.

2. *Equitable sharing of contributions.* On cash-crop farms an important item is the fair sharing of fertilizer costs.[1] Fertilizer may be a

[1] Sharing of fertilizer costs is a big problem in farm leasing, and the reader is urged to consult publications on the subject. A common mistake is to confuse the imbalance resulting from a lack of volume with the question of equitable sharing.

most profitable investment in the area, but may not prove profitable to the tenant unless the landowner is willing to pay his proportionate share of the cost. Of course, a tenant may pay for all of the fertilizer and still realize a higher net return as long as his share of the yield increase is worth more than the fertilizer cost, but unless the landlord makes some other offsetting contribution, the tenant may resent standing the full expense.

3. *Reimbursement guarantees.* Cash leases avoid the problem of sharing inputs of improvement capital between landlord and tenant. Unless they include appropriate reimbursement guarantees, however, a young tenant may find that after he has invested some of his meager capital in a fertility build-up, he has lost the lease and his capital with it. Under a reimbursement guarantee, the landlord agrees to pay the tenant at the end of the tenancy for the unused portion of any improvements the tenant has made. Without assurance of continuing tenure, reimbursement guarantees are necessary to protect the tenant's investments in capital improvements.

4. *Security of tenure.* Initial leases might well include some provisions for security of tenure that would encourage the beginning operator to invest his funds in improvement capital or more adequate levels of working capital.

The experiences of two young men in Kansas point up this problem of security of tenure. Glenn and his young family had been farming only four years as tenant operators on a badly run-down farm. The owner of the farm died suddenly, and plans for settling the estate forced Glenn either to buy the farm or move. Fortunately, he obtained the necessary credit from the Farmers Home Administration with which to buy the farm, and he and his wife were able to continue farming as owner-operators.

The second young man, Frank, had his share of experience with uncertain tenure. He and his wife recognized the limitations of small inadequate units. His wife wisely observed, "It is getting harder all the time to make something on a small farm." Frank added, "It takes almost as much investment to farm a small place as it does a big one." So Frank and his wife decided to delay their start until they were able to rent a good farm on a livestock-share lease. At the end of three years, however, the farm they rented was sold, and they were forced to move on rather short notice. Now they could not afford to wait for a farm because they had commitments in investments of machinery and livestock. The best they could do was to rent a small, poor farm in an

out-of-the-way place three miles from a school. Since the farm did not provide full-time work, Frank took a part-time job working on the road for the county highway department. He had almost decided to give up farming when he heard about their present farm. In spite of the fact that both had a keen desire to farm, their experience with insecurity of tenure made them hold out for a five-year lease. Such leases are not popular with most landowners, which explains why, at least in the poorer land areas, ownership of farmland is one of the early goals of young farm families.

**Qualifications of desirable tenants.** Owners of productive, well-improved farms want tenants who have the machinery and equipment to do a timely and effective job of farming their land and who have demonstrated their interest and ability in farming. They want men who are willing to use fertilizers, antibiotics, insect controls, good seed, and other materials, practices, and techniques of modern farming.

Many owners are turning to professional managers to represent them in selecting tenants and in performing the managerial functions of nonoperating farm owners. Professional managers tend to have even higher standards of selection than do owners in general. One reason is that by selecting tenants who can assume a good deal of responsibility professional managers can simplify their own management problems and thus serve more clients.

Owners compete with one another too for men with the personal attributes of good farmers. Among these attributes are: (1) a liking for farm work and farm life; (2) a knowledge of modern production practices; (3) a willingness to work; (4) an interest in increasing the productivity of the farm; (5) neatness; (6) a willingness to cooperate with the owner or his manager; (7) honesty; (8) promptness and thoroughness in business relationships; and (9) competence in money management. A minimum of a high school education plus a demonstration of his interest and ability through club projects, custom work, on-the-job performance, credit experience, and civic participation will go a long way toward attracting the attention of owners with farms to rent or sell.

## Father-Son and Other Joint Operations

Father-son farm operating agreements and farm leases between tenant-owner relatives are the most common tenure arrangements among beginning farmers. Since most states have publications on father-son agreements and farm leases, the subject will not be discussed in detail here.

Among the forms of transfer given on page 13, the four most commonly used by beginning farmers who get started *without substantial family assistance* are: (1) crop-share or crop-share-cash leases; (2) cropper arrangements; (3) labor-share arrangements; and (4) land contracts. Each of these places a minimum, or at least a relatively low, capital requirement on a family beginning farming. The crop-share leases have already been discussed (see page 16), and land contracts will be discussed on page 25.

Cropper and labor-share arrangements often require no capital contribution at all from the operator. Cropper arrangements are not commonly used in the North Central states. They are found in this region almost exclusively on the cotton or tobacco farms in southeastern Missouri and in Kentucky.

Labor-share leases (sometimes called profit-sharing plans), while not common in the corn belt, are found mainly on livestock or dairy farms. Some owners prefer such arrangements because they want to keep a productive organization or a livestock herd intact, or because they want to operate a farm without personally participating from day to day. They seek a capable and interested young man to furnish part or all of the labor and to work into management of the business under their guidance. The incentives for the young man, of course, are a share of the management earnings and profits, and an opportunity to accumulate capital and become a farm operator. Labor-share leases, although an excellent tenure arrangement under certain conditions, are not readily available or generally offered by the average landowner. Only owners with a desire to share more intimately in the operation and management of the farm business will prefer a labor-share arrangement over conventional share leases.

A labor-share lease is quite the opposite of a cash lease. Under a labor-share lease, the operator provides little or none of the farm capital. He shares in the production and price risks only to the extent of his share in the returns from the farm business. Even then some of these risks are shifted to the owner by a characteristic feature of many labor-share leases — a guaranteed minimum return to the young operator, usually equal to a hired man's wage.

Labor-share leases are similar to father-son operating agreements, except for the kinship between the two parties and particular agreements that arise out of this kinship. The critical part of a young operator's contribution under a labor-share arrangement is his participation in management. Two case histories illustrate this point.

Don and Bill, both agricultural college graduates, wanted to become farm operators, but lacked the capital and family assistance necessary to get them started in an adequate farm business. Both took jobs, one in agricultural education, the other in extension work. Some time later, Don was offered an attractive profit-sharing arrangement on a good 600-acre hog-and-cattle farm. The owner offered to furnish all the necessary capital. Don was to manage the entire operation. After much thought and deliberation, he turned the offer down. The major reason for his decision was his feeling of inadequacy. "After all," he explained, "I grew up on just a small chicken farm."

Don's experience points up one of the great needs, other than land and capital requirements, of farm boys who want to go into farming on a scale and with a combination of enterprises that lie outside their home farm experience. As both boys said, they "knew what the book said" about modern, efficient farm-management practices, but they lacked confidence in their own ability to do the job.

Bill finally removed the doubt in his mind by taking a job for a year as a hired man on a cattle-and-hog-feeding farm — the kind of farm he wanted to operate. "After that year," he said, "I was sure I could do the job." With the counsel of one of his college professors, he started in farming as the manager-operator of a fertile 200-acre farm. He is now happily established in a profit-sharing arrangement that gives him major responsibility in buying, feeding, and selling 300 to 400 head of feeder cattle and 150 to 200 hogs a year.

Not all farm boys, of course, who seek a start in farming experience the same personal uncertainty that Don and Bill did. But the problem does exist when young people make a start in an environment outside the home farm and when there is no opportunity for the young operator to grow into the business and to discover and develop his managerial ability. A helpful apprenticeship as a hired man under a good farmer may be one of the answers. Just as the business world does not thrust executive responsibility upon inexperienced men, neither should agriculture expect beginning farmers to have the fully developed, managerial competence with which to meet the problems created by a modern, family-farm business that employs upwards of $50,000 total capital per man.

While labor-share leases provide an excellent means of starting in farming for qualified young men without capital, the number of opportunities for making such a start are extremely small.

Observations indicate that starting in farming on a father-son agreement or labor-share lease may end in the young operator's decision to

quit farming. These are the easy ways to get in and to get out of farming. The young man who has no major capital commitment or investment in machinery and equipment and is discouraged by adverse experiences with drouth, wet weather, hail, or unfavorable prices may decide to quit farming for an urban job. It is this same tendency, or ease of leaving agriculture, that makes some farm owners hesitate to take an inexperienced young man into a labor-share operating arrangement unless the young man is willing to give some kind of surety of completing his contractual obligations.

## Buying Land

Young farm families may view buying land in two different ways. They may see it as a means of investing savings accumulated from the earnings of their farm business, or they may see it as a means of gaining possession or security of tenure on a given tract of farmland. As long as beginning farmers have security of tenure and opportunities of adding profitably to their investment in operating capital by increasing inventories of machinery and equipment or expanding livestock enterprises, they are not likely to turn to land for investment opportunities.

On many farms in the North Central Region, young tenants find their tenure insecure unless the land happens to be owned by a relative. Under such circumstances, ownership to assure continuation in farming becomes desirable. But purchases for this purpose are likely to be attempted with minimum equities or down payments. Such purchases are also likely to be too small for efficient operation or adequate family incomes. Such families must either rent additional land or engage in part-time farming.

Beginning farm families seeking to buy farmland must compete with established farm operators and investment buyers. Small acreages attract more buyers because the down payments are small. Established farm operators with growing family labor supplies and ample inventories of machinery and equipment are able to pay a premium for land to add to their current operating units because they can spread fixed costs over more acres and more units of production.

Up to 1954, only 5 of 182 farm families who began farming in Clinton county, Indiana, between 1947 and 1953 had bought after they got started. Of these 5, one family bought 80 acres. The other four bought tracts of 20 to 40 acres. Only 3 of a sample of 57 beginning farm families in Michigan bought farmland during their first two years as farm operators.

Those young families who seek to buy land as a means of assurance of being able to continue farming face problems in addition to size of farm and competition for land. Lower-priced land tends to be attractive to young farmer-buyers because, like the small tracts, it tends to be more within the range of their capital resources. Before committing themselves to the purchase of such land, young families need to consider the position in which buying would put them with respect to: (1) needed improvements on such land; (2) the effect such a purchase would have on the availability of credit for operating capital; (3) the possible level-of-living sacrifices that may be involved; and (4) the returns they could get from the same dollar investment in a smaller acreage of high-quality land.

Some low-priced land may be so depleted that it is uneconomical to farm without additional investments in limestone, rock phosphate, other fertilizers, drainage, fencing, and so on. Before they make any commitments to buy land, young families should determine what other additional capital they will need and budget it as part of their total financial and credit requirements. Such investments of additional improvement capital may easily amount to $25 or more an acre.

It is unwise for a young farm family to deplete its credit resources by buying to the point at which it is unable to finance a needed investment in machinery, equipment, and livestock. A young Minnesota family discovered that the terms of a land contract by which they bought a 240-acre farm were such that they were unable to obtain credit to finance an adequate set of machinery and enough roughage-consuming livestock to market the hay and pasture crops on the farm.

A careful budget of probable net returns above operating and financing costs from purchased land should be evaluated in terms of a realistic estimate of family living needs. Some sacrifices in order to achieve land ownership and establishment in farming are acceptable, others are not. The point is to determine as nearly as possible what consequences may reasonably be expected from the purchase of a given piece of land before commitments to do so are completed.

When prospective buyers budget or estimate net incomes from different choices in the purchase of land, they should include the possibility of buying high-quality land, even though it means a smaller acreage. In many areas, it is possible to rent additional land so that a young family is not necessarily limited to farming only the small acreage it may be able to buy. Of course, this alternative removes only part of the uncertainty of tenure and may leave the young family over-expanded on a small acreage.

**Buying land by means of land contracts.** A growing number of farm families are avoiding the restrictions that low funds and mortgage financing place on the acreage and quality of land they buy. They are buying land on contract, a transfer device that permits very low down payments or none at all. The seller is protected by retaining title to the land until payment has been completed or until the terms of the contract permit a shift to mortgage financing. Land contracts usually require the buyer to make payment in a series of installments on the principal plus interest on the unpaid balance. The buyer takes possession of the land and assumes the cost of real estate taxes, insurance, and maintenance of improvements.

Land contracts are variously known as contract for deed, sales contract, installment contract, or conditional-sales contract. The particular language in many land contracts allows the seller, in the event of default by the buyer, to construe as rent payments already made and to take immediate possession of the land.

Young farmers who contemplate land ownership by means of land contracts are advised to seek the counsel of a good lawyer. The law regarding land contracts varies from state to state. Some states have specific legislation applying to this type of instrument, while in others land contracts are merely subject to the general law of contract. In some states, for example Missouri, a deed of trust, or other devices that allow rapid recovery of the property in case of buyer default, may be preferred to land contracts.

Land contracts can be extremely variable in content and provisions, even within the same locality. Young families are cautioned to become well informed about contracts and to get legal counsel before committing themselves to the terms of a particular contract.

**Experiences with land contracts.** Experiences of two young Minnesota families may illustrate some of the opportunities and some of the hazards of buying land by means of land contracts.

Mack was manager of a trucking firm in Iowa, but he and his wife badly wanted to farm. After spending a year looking for a suitable farm in Iowa to rent on acceptable terms, they decided to buy some less valuable land in Minnesota. They had accumulated $5,000 toward a down payment, but this was not enough to buy an adequate farm under mortgage financing. They were able, however, to buy a 195-acre farm on contract at a fair price, $20,000. Their $5,000 down payment represented an equity of 25 percent. The house was modern and well kept, but other buildings would soon need to be replaced. There was also a

drainage problem on part of the farm, but altogether the price was well in line with the productive value of the land.

The contract required a $600 payment on the principal each year for the next 10 years plus interest at 4 percent on the unpaid balance. At the end of 10 years, Mack and his wife will have paid $11,000 of the $20,000 purchase price. The contract requires the seller to give them a deed to the farm at that time in exchange for a mortgage for the balance of the purchase price. In the meantime the Macks are in possession of the farm. They pay taxes and insurance and maintain the improvements.

The down payment left the Macks without enough money to buy the necessary operating equipment. They got a loan of $6,000 from the Farmers Home Administration to buy machinery and equipment. This indebtedness, when added to the unpaid balance on the land-purchase contract, made a total debt of $2.10 for each dollar of net worth. This is a long way from the traditional maximum debt of $1.00 for each dollar of net worth, but the repayment provisions of their land-purchase contract do not make it a particularly burdensome debt.

Contrast this experience with that of Robert and his wife who bought a 240-acre farm in Minnesota. The buildings on Robert's farm were in better shape than those on Mack's and the 200 acres of tillable land were more productive, but in spite of these differences, the $42,000 Robert contracted to pay is a relatively higher price.

In place of a 25-percent down payment that Mack was able to make, Robert was able to make only $4,000, or less than 10 percent of the purchase price. Robert in effect has a zero equity in his farm because he borrowed the $4,000 down payment from a close relative on a no-term note.

Robert's contract calls for principal payments of $2,000 the first year, $3,000 the second, and $4,000 each year for the next 8 years. Interest each year is 4½ percent on the unpaid balance. The interest and principal payments Robert and his wife contracted to make amounted to $3,710 the first year, $4,620 the second year, $5,485 the third year, $5,305 the fourth year, and $5,125 the fifth year. At the end of 10 years, the unpaid balance will be down to $1,000 if all payments are made according to contract.

Robert's position was the same as Mack's with respect to operating capital, but because of the terms of his land contract, Robert has repeatedly been denied credit for operating capital. Consequently he is attempting to operate the farm with a minimum inventory of machinery and equipment and without the livestock necessary to properly

utilize the roughages produced on the farm. His contract payments of principal and interest will exceed $25 per tillable acre in 3 of the first 5 years. It is safe to say that this $25 is well beyond what each acre of tillable land will earn as a return to land, and if these payments are met, they will be met by diverting money from family living and from expenditures necessary to maintain the improvements.

These experiences point out the need for certain provisions in land contracts.

**Desirable provisions in land contracts.** Most young families will find the following provisions desirable in a contract: (1) a repayment period long enough to allow annual payments to be low enough to be consistent with the earnings of the land; (2) the privilege of making prepayments in good years that may be applied on the contract in years of crop failure, or a moratorium provision postponing principal payments in such years provided that interest payments are made; (3) a provision permitting the buyer to convert the contract to mortgage financing and to receive title to the land after payments on the principal equal half the purchase price; and (4) a grace period of a given number of days (some suggest 45 days) beyond the due date on payments before default proceedings may be started.

A number of other provisions can be written into land contracts to safeguard the interests of both buyer and seller. Among such provisions are flexible payment plans. They may be based on a percentage of the income from the farm or on the current value of a specified quantity of the major product from the farm. Through other provisions the risk of changes in land values can be shared throughout the life of the contract. One example would be a contract in which the price of the farm was set at 42,000 bushels of corn and annual payments on the principal set at 2,000 bushels. Interest on the unpaid balance was calculated on the current value of the remaining amount of corn. Other contracts have called for monthly rather than annual payments, particularly where dairying was the major enterprise and where the farm income was received mainly in the form of monthly milk checks.

## Renting Versus Buying Land

Most young families start farming as tenants and many face uncertainty regarding continued tenure on their rented land, as has already been pointed out. Moreover, nonreal-estate-capital requirements for efficient and rewarding ventures into farming are high.

These facts pose some serious questions for beginning farm fam-

ilies, particularly for those who are attempting to get established without substantial family help. Should they try to remove some of the uncertainties of tenure by applying part of their limited equity capital to the purchase of farmland? Can they buy enough land for efficient operation and adequate level of income? Will the land they can buy require heavy additional investments in soil fertility, drainage, fencing, water conservation and development, or structural improvements before it can be farmed efficiently? If so, will they be able to finance these necessary additional investments? Will commitments for buying land leave them so short of operating capital that they will have to sacrifice income? What, if any, opportunities are there to supplement a small acreage of owned land with rented land or with work off the farm? How uncertain will be their ability to continue to rent such additional land?

Obviously, there is no single or set answer to these questions. Each must be answered in the light of the particular circumstances in which it is raised. Several important principles, however, can be applied to arrive at the best course of action.

1. Labor, usually a beginning farmer's most abundant asset, is most productive when used with adequate amounts of capital in the form of machinery, equipment, fertilizer, and so on, on an acreage or with a volume of livestock large enough to provide full employment.

2. Spreading the fixed costs (interest and depreciation) on machinery and equipment over more acres or units of production reduces these costs per unit.

3. The returns from a limited amount of capital will be greatest when the capital is invested in such a way that each dollar added (both owned and borrowed) is put where it will earn the most. Dollars tied up in the purchase of land may return less than the same dollars invested in machinery, feed, livestock, fertilizer, etc.

4. Uncertainties of tenure can be removed or reduced by written leases, properly drawn.

The advantages of larger farms are such that beginning farmers must compete with established operators for land. Such competition adds to the uncertainties of tenant operation. But it has also added to the price paid for farmland and consequently, reduces the return per dollar invested in farmland. The best course of action for any given young family will be determined by its personal preferences and a careful estimate of the probable consequences of choosing each of the alternatives available to it.

As farms increase in size, two tenure problems also increase. The first is the problem of finding or developing a satisfactory tenure arrangement under which these larger acreages can be held. The second is the difficulty that beginning farm families face in acquiring the use of an optimum amount of land for efficient operation. If most farmers begin farming in some kind of tenancy status and if this method of starting persists or increases in the future, then the question that a beginning farmer faces is this: How can I convince the owner of a desirable farm that he should enter into a lease agreement with me as the operator? Or, how can I convince him that he should rent me additional land? The question assumes that the young man has satisfied himself that he has the ability and the capital (or can get them) to operate such a farm.

Competition for farms is keen in most areas of the midwest and is likely to continue to be. In general, an owner may choose a given individual as his tenant, joint-operator, or buyer because: (1) he has a personal interest in the chosen person; (2) he believes in the man's ability as a farmer to earn a higher rent or he believes in his ability as a buyer to pay a higher price than others competing for the farm; (3) he thinks that other tenants or buyers would not be interested because the farm is small, undesirable, depleted, or lacking improvements; or (4) in a given area, good tenants may be scarce and hard to find.

Personal interest probably influences the choice of new farm operators more often than the other reasons. Fathers give preference to sons or sons-in-law. Other owners tend to give preference to relatives, personal friends, or members of social, religious, or fraternal groups. Our concern here, however, is primarily with those who must obtain possession of farmland on a more competitive basis than these men.

Competition for farmland tends to give established farmers an advantage over farmers trying to make a start without substantial family help. Such young families frequently meet the competition by being willing to accept less desirable farms — farms without a modern house, farms with depleted, unproductive soils, or farms remotely located from schools, shopping centers, or highways. Such farms may offer only meager opportunities for the accumulation of capital, but if the young family is willing to pay the price, they may be a means of demonstrating farming ability to prospective landlords on better farms.

## Part-Time Farming as a Route Toward Getting Established in Full-Time Farming

Part-time farming may be a goal in itself, or it may be an important step in the transition between a start in farming and getting established in something less than a full-time operation. Among the 175 beginning farmers in the Missouri study, 64 started with a farm operation of less than 150 productive man-work units. Of these 64, 34 (53 percent) did off-farm work on an average of 72 days during their first year in farming.

In a sample of 73 young farmers in southern Illinois, who in 1954 had been farming an average of 6 years, 18 percent were part-time farmers. In a similar sample of 58 young farmers in Michigan, 25 (43 percent) were farming part-time in 1955.

Some young families have solved their farm financial problems by turning to off-farm employment as an assured source of income from which to meet contracted obligations. If the problem of caring for small children can be solved, the young farm wife can sometimes provide this supplementary income by taking temporary employment at a nonfarm job. Opportunities for off-farm jobs are most numerous in industrial states such as Ohio, Indiana, and Michigan. A limited number of opportunities are available within driving distance of the large urban centers in any state.

Part-time farming is the tentative answer to the two most difficult problems in getting established in farming: (1) that of finding an adequate farm to provide full-time employment; and (2) that of accumulating sufficient operating capital to make efficient use of the available labor. How effective the part-time method is in accumulating operating capital depends largely on the family's willingness to save.

A young man may get into part-time farming by starting with a job in town and being alert to opportunities to rent or buy a 60- or 80-acre tract that he can operate during his free time. He begins by accumulating machinery and equipment, investing only in essential items and depending on hiring custom operators to do such jobs as combining, baling, and corn picking. Owning the machinery for these operations would require not only a substantial investment but would prove uneconomical on small acreages. A young operator occasionally reverses the procedure and finds employment for his surplus labor and investment in machinery and equipment by doing custom work for neighboring farmers. Competition for custom work is usually keen, however, and unless he is assured of an adequate volume of work, he may find his venture costly.

The step from part-time to full-time farming involves either renting or buying additional land or moving to a farm large enough to provide full employment. Part-time farmers feel that while they are waiting for an opportunity to farm full time, their farming operations keep them in touch with current developments in agriculture and in contact with opportunities to acquire additional land or larger farms. The income from the nonfarm employment also provides a source of savings from which to finance the additional operating capital necessary for full-time farming.

Not all part-time farmers want to go into full-time farming. A

**Table 5. — Average Financial Position of Specified Groups of Farm Operators, Ohio, 1954[a]**

| | Part-time operators making progress toward full-time farming[b] | | | Operators rated as established in full-time farming |
|---|---|---|---|---|
| | Least progress (1) | Average progress (2) | Most progress (3) | (4) |
| Number of operators | 22 | 22 | 11 | 18 |
| Average days of nonfarm work by operator | 223 | 218 | 232 | ... |
| Average number of P.M.U.'s in the farm business[b] | 69 | 137 | 258 | 254 |
| Assets | | | | |
| Farm real estate | $15,722 | $12,663 | $17,455 | $14,127 |
| Other real estate | 2,273 | 591 | 182 | 2,150 |
| Personal property | | | | |
| Livestock | 1,340 | 1,570 | 2,909 | 3,587 |
| Farm machinery | 2,207 | 2,662 | 4,082 | 7,255 |
| Feed and supplies | 868 | 1,105 | 1,455 | 2,868 |
| Automobiles and trucks | 1,245 | 1,077 | 1,191 | 1,222 |
| Household goods | 2,095 | 1,868 | 2,045 | 2,067 |
| Other | 1,382 | 693 | 1,309 | 583 |
| Total personal property | $ 9,137 | $ 8,975 | $12,991 | $17,582 |
| Total property owned | $27,132 | $22,229 | $30,628 | $33,859 |
| Liabilities | | | | |
| Real estate mortgage debt | $ 4,270 | $ 4,841 | $ 3,448 | $ 7,064 |
| Other debt | 621 | 1,231 | 745 | 1,857 |
| Total debt | $ 4,891 | $ 6,072 | $ 4,193 | $ 8,921 |
| Net worth | $22,241 | $16,157 | $26,435 | $24,938 |

[a] Method of estimating value for groups (1), (2), and (3): Real estate value — estimated from current tax valuation-sales price ratio of farm real estate applied to the tax valuation of property in each case. Livestock — estimated from market prices and quality of livestock. Farm machinery, motor vehicles, household goods, and other property — estimated from new cost less depreciation. Liabilities of groups (1), (2), and (3) — estimated from recorded debt and statements of respondents when interviewed. All operators in group (4) provided statements of assets and liabilities.

[b] Degree of progress was measured by number of productive man-work units the farm business provided, ranging from less than 100 for the "least" to more than 200 for the "most" progress. A PMU is equal to a ten-hour day spent on a productive (crop or livestock) enterprise.

study of 244 representative part-time farm families in Ohio revealed that only 28 percent expressed an active interest in becoming full-time farm operators. (For a comparison of the average financial position of this 28-percent group with a second group who had progressed to essentially full-time operators, see Table 5.) The average days of work in the nonfarm jobs reported by these part-time farmers ranged from 218 to 232. These were essentially 40-hour-a-week jobs with time off for vacation and holidays. In addition to the nonfarm work performed by the operator, the work performed on the farm ranged from an average of 69 productive man-work-units by the group that has made least progress toward full-time farming to an average of 258 man-work-units by those that had made the most progress. Obviously, some of this farm work was done by members of the family other than the operator, but it is clear that part-time farming means, in fact, holding two jobs and the total number of hours put in may be long indeed. The net worth of the established full-time farmers did not differ particularly from that of the part-time operators. The greatest differences occurred in the investment in farm-operating capital; that is, in livestock and machinery.

The average size of these part-time units ranged from 65 acres of cropland for the 55 part-time farmers seeking to become established as full-time farmers to 126 acres of cropland for the 18 full-time farmers who had started as part-time operators (Table 6).

One of the real problems of using the part-time route to getting established in full-time farming is the difficulty of making the transition. The loss of the regular income from the nonfarm job is the most

**Table 6. — Average Size of Farm and Land Use Among 55 Present and 18 Former Part-Time Farmers, Ohio, 1954**

| Land use | Part-time operators making progress toward full-time farming | | Operators farming full time but formerly part time | |
|---|---|---|---|---|
| | Acres | Percent | Acres | Percent |
| Corn and soybeans | 23 | 20 | 47 | 25 |
| Small grains | 17 | 15 | 28 | 15 |
| Other crops | 1 | 1 | 2 | 1 |
| Alfalfa and other hay | 16 | 13 | 27 | 14 |
| Rotation pasture | 8 | 7 | 22 | 12 |
| Total cropland | 65 | 56 | 126 | 67 |
| Permanent pasture | 25 | 22 | 35 | 18 |
| Other land | 26 | 22 | 28 | 15 |
| Total acres in farm | 116 | 100 | 189 | 100 |

difficult step in the adjustment. This transition is easiest if it is anticipated and savings are accumulated to provide for family-living needs until an expanded farming operation can restore the level of income.

Of the part-time farmers, those that in terms of productive man-work-units were closest to being full-time farmers had the least disposable income available for family living and other personal expenses (Table 7). The difference in the amount of nonfarm income between those who had made least progress and those who had made most progress toward full-time farming may be in part a measure of the difficulty these men have in giving enough attention to their nonfarm jobs to make them eligible for promotions and higher pay. When one is overburdened with two almost full-time jobs, the quality of the farm work is likely to suffer too. The rigid time schedule of a nonfarm job may conflict with the timely performance of certain tasks on the farm. When viewed realistically, part-time farming is apt to result in less than optimum or even satisfactory performance in both farm and nonfarm work.

Part-time farming may also be a consequence of an inadequate start in farming or a start on a farm unit that offers less than full-time employment for the operator's labor. Thus part-time farming may be viewed as a street carrying three streams of traffic: (1) those who have entered part-time farming as a stepping stone toward establish-

Table 7. — Estimated Average Gross and Net Receipts, Farm and Nonfarm, and Expendable Income, Specified Groups of Farm Operators, Ohio, 1954

| Items | Part-time operators making progress toward full-time farming | | | Operators rated as established in full-time farming |
|---|---|---|---|---|
| | Least progress | Average progress | Most progress | |
| Number of operators | 22 | 22 | 11 | 18 |
| Gross farm receipts | $2,247 | $3,063 | $5,031 | $7,868 |
| Cash farm expenses and depreciation | 1,996 | 2,619 | 4,283 | 4,795 |
| Net farm income | $ 251 | $ 444 | $ 748 | $3,073 |
| Gross nonfarm receipts | $4,380 | $3,939 | $3,109 | $1,284[a] |
| Travel expenses | 290 | 283 | 302 | 50 |
| Net nonfarm income | $4,090 | $3,656 | $2,807 | $1,234 |
| Total net income | $4,341 | $4,100 | $3,555 | $4,307 |
| Interest and debt payments | 737 | 1,037 | 688 | 1,535 |
| Disposable income for family living, income taxes, and other savings | $3,604 | $3,063 | $2,867 | $2,772 |

[a] Income from investments, working wives, custom work, and occasional short jobs off the farm.

ment in full-time farming; (2) those who have found it necessary to supplement their farm earnings with off-farm income and who will eventually devote most of their time and energy to nonfarm work; and (3) those who are part-time farmers because they prefer to be and who intend to remain part-time farmers and eventually retire in their rural homes.

## MEETING NONREAL-ESTATE CAPITAL REQUIREMENTS

The general level of $15,000 in farm-operating capital on one-man farms has already been mentioned. Comparing this figure with the capital investments of men reared on farms who did not get started in farming provides another perspective on farm-operating capital requirements. Such a comparison was made possible by an Illinois study in which data were obtained on all members of selected eighth-grade classes of farm-reared boys. In 1954, when these men were about 30 years old, and when those who became farmers had been farming an average of 6 years, each was asked to report his current investment in the tools, equipment, and place of business in which he worked. The average investment among the men who were then farming was a little over $10,000; the average for the total number who were not farming was about $700.[1] These figures would indicate that an average investment of a little over $10,000 is necessary to hold a job as a farm operator compared with an investment of about $700 to hold a job outside agriculture.

According to findings in Illinois, the intellectual requirements of being a farm operator may be considered as great as or greater than those required by most jobs held by men who left the farm. Thus the capital requirements of farming can be viewed as an additional requirement on those who would become farmers. The farm-capital requirements are comparable to the training and educational requirements in professional work. Such training may be considered a type of capital — an investment in human abilities and skills.

### Sources of Farm-Operating Capital

There are four general sources of farm-operating capital: (1) accumulated savings out of earnings, including the earnings of past savings; (2) gifts, inheritances, or other forms of gratuities; (3) borrowings; and (4) leasing or contractual arrangements.

[1] A little less than one-fourth of their classmates, who were not farming, reported such investments, the average of those reporting being about $3,500. These men owned trucks, plumbers' tools, retail stores, filling stations, etc.

Studies in Michigan, Missouri, Indiana, and Illinois reported the net worth of beginning farmers at the start of their first year in farming. The average date of starting for all these groups was 1948. The average net worth of the southern Illinois sample was approximately $2,900, the average of the Missouri sample was $3,500, the Indiana about $4,000, and the Michigan about $4,400. The most important source of savings in these initial net-worth positions consisted of earnings from the home farm. Savings from off-farm work were a close second. Savings from farm labor off the home farm and from military service made additional important contributions to this original net worth.

From a third to a half of the beginning farmers in these samples reported nonfarm work at some time previous to the time they started farming. This suggests that when the home farm is not large enough to utilize profitably a son's labor, the young man interested in accumulating capital for a start in farming must consider a job off the farm. If he can find such a job not too far from the home farm and continues to live at home, perhaps trading chore work and field work for room, board, and laundry, he can keep living costs low and capital accumulation at a maximum.

Those who get married close to the time they are getting started in farming need to include in their budget estimates capital requirements for both needs. In addition to the actual investment in machinery, equipment, livestock, feed, and household furnishings, they need to budget a source from which family living expenses will be met until the newly established farm business begins to yield enough income.

Less than 5 percent of the initial net worth of the beginning farm families studied came from gifts and inheritances. Gifts were important in establishing household inventories, but gifts and other types of family help on farm capital needs were usually given during the first two years in farming rather than before starting.

Providing for regularly recurring needs in the first year in farming (such as family living requirements, livestock supplements, crop seeds, and tractor fuel) requires either short-term borrowing, drawing on savings, or income from temporary off-farm employment. A young farmer in Michigan rented a farm, bought a herd of yearling dairy heifers, and then took a job in an automobile plant until the heifers began to freshen. In this way he avoided the higher capital requirement of buying cows, and used his nonfarm income to meet current expenses until he had a milk check coming in regularly.

The forms in which total capital accumulation at the beginning of

Table 8. — Assets and Liabilities Accumulated Before Starting to Farm by a Group of Farm Families in Clinton County, Indiana, Who Started Farming From 1947 Through 1953[a]

| Assets and liabilities | Percent holding each item | Average amount held |
|---|---|---|
| Assets | | |
| Real estate | 8 | $ 972 |
| Livestock | 43 | 382 |
| Machinery | 37 | 690 |
| Feed, seed, etc. | 22 | 377 |
| Auto, truck | 94 | 860 |
| Household goods, personal items | 100 | 1,039 |
| Cash, bonds, etc. | 98 | 1,456 |
| Total assets | .. | $5,776[b] |
| Liabilities | | |
| Real estate debt | 7 | $ 360 |
| Nonreal estate debts | 13 | 161 |
| Net worth | .. | 5,255 |
| Total liabilities | .. | $5,776[b] |
| Total nonreal estate capital used in getting started in farming | .. | $8,196[c] |

[a] Adapted from data in unpublished doctoral thesis, "Problems of Capital Accumulation in Getting Started in Farming," by Lester Arnold, Purdue University, 1955. Used by permission of the author.

[b] Includes only assets and liabilities accumulated by the family up to the time of starting to farm. Does not include any items accruing from credit obtained during the first year of farming.

[c] Includes loans received during the first year of operation and proceeds from the sale of some real estate assets.

the first year of farming may be held are shown in Table 8 by the experience of a group of beginning farmers in Indiana. Household goods represented a large part of the beginning net worth. Such capital is not productive, but an adequate initial inventory of household goods is necessary to avoid a heavy drain on farm income for consumption purposes.

## Borrowing to Meet Capital Needs

Total capital requirements for starting in farming are so high that few young men are able to save from earnings the entire amount needed and still make a timely start. Credit is therefore an important source of initial capital.

**Credit experiences of beginning farm families.** Studies in Indiana and Illinois showed at least three important characteristics of the credit experiences of beginning farm families.

One important characteristic is that for many young farm families this is their first experience with the use of borrowed money. In a group of farm-reared boys in southern Illinois, 58 percent of the

young men who were farming in 1954 said that their first use of borrowed money was to finance the machinery and livestock with which they made their start in farming (Table 9). Another 10 percent used their first credit to buy farmland, and 6 percent used it for other productive purposes. Thus about 75 percent used their first credit for productive purposes, compared with only 20 percent using it in that way by their classmates who were not farm operators. Money borrowed to buy a home was not included in this comparison.

Since a tenant farm operator usually obtains the use of the farm residence along with the land he rents, one might say that part of the cost of the machinery and equipment that he had to have in order to rent the land could be considered as a cost of acquiring a home. Even if we include among the nonfarmers who made productive use of credit the 22 percent who used their first borrowed money to buy a house, the comparison would still be heavily weighted toward the farm operators. Slightly over half of the nonfarmers used their first credit to buy an automobile.

The sources of these initial loans reflect in part the purposes for which they were used. Commercial banks were about equally important to farmers and nonfarmers. Finance companies were more important to the nonfarming group. Parents and other relatives were more important to the beginning farm operators than to the nonfarmers. Differences in the sources used by farmers are partly due to differences

**Table 9. — Initial Credit Experiences Among a Sample of Farm-Reared Men Representing Two Eighth-Grade Classes in Washington and Jefferson Counties, Illinois, by Occupational Status in 1954**

| | Farm operators in 1954 | Men not farming in 1954 |
|---|---|---|
| Number of men | 68 | 108 |
| Number who had never borrowed | 6 | 13 |
| Number reporting on their first loan | 62 | 95 |
| Percent who used their first loan for: | | |
| An automobile | 18 | 51 |
| A house | 2 | 22 |
| Farmland | 10 | 2 |
| Farm machinery or livestock | 58 | 7 |
| Other productive purposes | 6 | 11 |
| Other nonproductive purposes | 6 | 7 |
| Percent who obtained their first loan from: | | |
| Parents or other relatives | 40 | 23 |
| Commercial banks | 42 | 40 |
| Finance companies | 13 | 31 |
| Other sources | 5 | 6 |

Table 10. — Sources of Borrowed Capital Used by Beginning Farmers in Clinton County, Indiana, 1947-1953, During Their First Two Years in Farming[a]

| Source of credit | Percent of total credit used | | | |
|---|---|---|---|---|
| | By farmers with substantial family assistance | | By farmers without substantial family assistance | |
| | First year | Second year | First year | Second year |
| Relatives | 32 | 30 | 7 | 4 |
| Landlord | .. | .. | 25 | 21 |
| Other individuals | 10 | 10 | 3 | 5 |
| Merchants and dealers | 8 | 12 | 8 | 11 |
| Commercial banks | 33 | 42 | 34 | 29 |
| Production credit associations | 14 | 3 | 5 | 16 |
| Farmers Home Administration | 2 | 2 | 15 | 11 |
| Other sources | 1 | 1 | 3 | 3 |
| Total | 100 | 100 | 100 | 100 |
| Percent carryover of total nonreal estate credit used | 44 | 49 | 50 | 44 |

[a] Adapted from Purdue (Ind.) Agr. Exp. Sta. Bul. 638. 1957.

in the ability of the parents and relatives to extend sufficient credit to sons and sons-in-law to meet the capital requirements of starting in farming.

A second important characteristic of the credit experiences of beginning farm families is the role of individuals in supplying credit. The sources of credit used by farmers making a start in farming in Clinton county, Indiana, from 1947 through 1953 were compared for those receiving substantial family assistance and those not receiving such assistance (Table 10). The main differences between the two groups were that those receiving substantial family assistance of course relied more on relatives as a source of credit, while those who started farming without substantial family assistance depended more on the Farmers Home Administration and nonrelated landlords. The table reports direct loans received from landlords; in addition, some leasing and contractual arrangements were used as alternatives to owning and borrowing operating capital.

A third important characteristic of the credit experiences of beginning farm families is the high proportion of intermediate-term credit required. Among the Clinton, Indiana, families, a surprising amount of credit was obtained from individuals on no-term notes (Table 11). For those receiving substantial family help, such credit was initial capital loaned to them without a repayment date specified. While the

Table 11. — Length of Terms on Notes for Credit Obtained by Beginning Farmers in Clinton County, Indiana, 1947-1953, During Their First Two Years in Farming[a]

| Source of loan | Percent from different sources for loan term specified | | | | | |
|---|---|---|---|---|---|---|
| | By farmers with substantial family assistance | | | By farmers without substantial family assistance | | |
| | None | 1-12 months | Over 12 months | None | 1-12 months | Over 12 months |
| Individuals | 62 | 18 | 57 | 71 | 9 | .. |
| Lending institutions | .. | 79 | 36 | .. | 91 | 99 |
| Merchants and dealers | 38 | 3 | 7 | 29 | .. | 1 |
| Totals | 100 | 100 | 100 | 100 | 100 | 100 |
| Percent of total credit obtained | 30 | 59 | 11 | 44 | 32 | 24 |

[a] Adapted from Purdue (Ind.) Agr. Exp. Sta. Bul. 638. 1957.

percentage of this type of credit seems high among those families without substantial assistance, its availability was usually tied in with the lease arrangement for the farm.

Lending institutions other than the Farmers Home Administration confined their loans largely to maturities of 12 months or less. Only 11 percent of the beginning farmers receiving family help had credit terms of more than 12 months and only 24 percent of the credit obtained by those without family help was of this kind.[1] FHA loans predominated among the second group.

The need for intermediate-term credit by beginning farm families is demonstrated in the repayment experiences of the Indiana sample. Even though only about one-third of the total nonreal-estate credit used was borrowed on a long-term basis, the debt carryover beyond the specified maturity date was such that in the actual repayment nearly 60 percent of the total nonreal-estate loans required more than 12 months for repayment.

Additional evidence of the need for intermediate-term loans is shown by a study of a sample of beginning farmers in Washington and Jefferson counties in southern Illinois (Table 12). The payments on principal made by these young families were scarcely more than enough to keep their debt carried over from one year to the next from increasing through current borrowing. Payments on principal amounted to 25 to 35 percent of the debt carried over in each of the first three years.

[1] Since these data were obtained, production credit associations and some rural banks have recognized the need for intermediate-term loans and are offering such credit to their farmer borrowers.

Table 12. — Amount of Debt Carried and Repayment Made During Their First Three Years in Farming by Beginning Farmers From Two Eighth-Grade Classes in Washington and Jefferson Counties in Southern Illinois

| | Class of 1940 | Class of 1936 |
|---|---|---|
| Number of beginning farmers reporting | 28 | 42 |
| Number with debt in their first year | 19 | 15 |
| Average debt repayment | $ 404 | $ 486 |
| Debt carried over at end of first year | $2,087 | $2,477 |
| Number with debt in their second year | 24 | 15 |
| Average debt repayment | $ 613 | $ 661 |
| Debt carried over at end of second year | $1,950 | $2,320 |
| Number with debt in their third year | 22 | 12 |
| Average debt repayment | $ 684 | $ 574 |
| Debt carried over at end of third year | $1,943 | $2,313 |

With no additional borrowing, repayment at these rates would have required maturities of three to four years. Such maturities appear to be reasonably in line with the self-amortization schedules of such capital purchases as major items of machinery and breeding livestock. Some, but not much, of the observed low rate of repayment was due to long-term real estate credit being included in the total indebtedness.

One must recognize, of course, that increases in net worth among these young families were not confined to the amount of debt retired. Beginning farm families usually prefer to build up inventories and make additions to operating capital from their income rather than to retire debts. This again illustrates the need for intermediate-term credit by beginning farm families. These families begin farming with low inventories of feed, grain, seed, small tools, breeding livestock, fattening stock, and the many other items that make up the total operating inventory of established farmers, so any credit used to finance intermediate-term capital on a short-term basis ignores the fact that a substantial part of the initial income will normally accrue in accumulations of these inventory items and will not be used for debt retirement except through forced liquidation.

**Financial management for beginning farmers.** It is not within the scope and purposes of this publication to present a detailed discussion on financial management, but the following statements are listed to call attention to the responsibility for making financial decisions and to the concept of net worth as a tool in measuring financial progress.

1. Money or its equivalent (credit, bank checks, etc.) is the life blood of the business world, including farming.

2. Anyone who cannot handle money wisely is not capable of entering fully into modern business management, including farming.

3. Every economically responsible individual is in some way concerned with earning, spending, saving, borrowing, lending, or investing money.

4. An individual's financial progress may be measured by the change in his net worth from year to year (net worth is the difference between the total value of what a man owns and what he owes at a given time).

5. Except for gifts, inheritances, and windfall gains, increases in an individual's net worth must come from savings made from income, including income from past savings.

6. The rate of change in net worth depends on the amount of net earnings, the amount spent on family living, and any change in the capital value of money invested.

7. Once a sufficiently large net worth has been established, it can contribute most to the goals of wholesome living, increased earnings, and financial security only if it is wisely proportioned and properly used. This means keeping a desirable balance between liquid assets (cash reserves), investments in home and living facilities, and investments in working capital in such a way as to allow credit, properly used, to supplement savings when needed.

**Restrictions on credit.** Three types of credit restrictions have significant application to beginning farm families: restrictions imposed by lenders, restrictions imposed by the young families themselves, and restrictions imposed by the tenure position of the families.

Among a sample of 76 beginning farmers in 1954 in central Illinois, 68 percent reported capital and financing as important problems encountered in getting established in farming, while 58 percent reported tenure as a problem, and 11 percent reported personal problems such as lack of education or training (some reported more than one). Even though two-thirds of these young men reported capital and finance problems as a major difficulty, few said these problems arose because they had been denied credit for which they had applied. So long as operating capital credit is limited, lenders must of course choose to whom they will make loans, and in this process some will be denied. If such denial is based on a careful appraisal of the young family's ability, resources, and probability of success in farming, society probably gains by such decisions. If lenders fail to exercise this selective function, then farming opportunities will be rationed solely by landowners and by parents acting also as creditors and landowners.

The Farmers Home Administration has authority to make operating loans and to make or guarantee farm ownership loans to eligible young families who are unable to get credit elsewhere. But even here not all who apply for credit can get it. When an analysis was made of 591 rejected applications for FHA operating loans in Illinois in 1952-53, it was found that almost 60 percent were rejected because the applicants were considered unworthy as farmers, or because their proposed farming ventures were deemed to be unsound, too small, or inadequate in some other respect. Only 40 percent were denied loans because they were unable to find farms or obtained credit elsewhere, or because the FHA loan funds were exhausted. However, among those seeking a loan with which to make an entry into farming, the major reason for rejection of applicants was their inability to find farms.

Personal uncertainty and lack of experience keep many young farm families or potential farm operators from even applying for credit to be used in establishing a farm business. Such uncertainty and lack of confidence may indicate a lack of managerial ability, and if so it may be wiser for the family not to enter farming. The result may be, however, that they are not prevented from entering farming but are merely prevented from doing so on an adequate scale, and then both the young family and society stand to lose. More educational efforts on the importance of a farm of adequate size and an adequate volume of business may be needed for both beginning farm families and farm lenders.

Many young families should, of course, restrict their use of credit in the face of well-known production risks. The risk of damage from drouth, hail, insects, floods, and frost differs greatly from one community to another. A beginning farm family should determine the frequency and extent of such losses in its community and on the farm on which it plans to make a start. The amount of equity (net worth) capital needed for a safe start will vary according to the risk involved. A young family that depends too heavily upon credit extended for one season only may find that it is sold out of farming if it loses its crop.

## Leases and Contracts as Financing Devices

Contract farming may have a certain appeal to beginning farm families who are so short of owned capital that they are unable to obtain enough credit to finance a desired level of initial operating inventories. Farm experience with low-equity financing has so far been primarily with land contracts and with farm leases that include

a full complement of operating capital, which we have referred to earlier as "labor-share leases." The contract arrangements that are offered by suppliers and market agencies are different.

We do not know how prevalent contract farming is among beginning farm families, but it is reasonable to believe that such contracts, insofar as they provide capital or a credit basis for securing capital, may appeal to young farmers who would find it difficult to enter farming otherwise. Young families considering entering farming in this way should carefully evaluate the financial progress, or lack of it, that such contracts offer. Unless they can expect earnings that will allow substantial savings and tenure promotions toward eventual independent operatorships, they may be contracting themselves into a position from which they can make no progress. On the other hand, a period of operation under the management supervision imposed by many contracts may provide a higher quality of management apprenticeship than is available on many home farms. It is important to review the specific terms of such arrangements to assure protection and proper compensation for the operator.

Another development is a rental service on major items of farm machinery and equipment. Some machinery dealers offer both new and reconditioned machinery on a rental basis at specified rates per hour, per day, or per week. The rates are high enough to cover all the costs of ownership, maintenance, and operation which a young farmer would have to incur if he owned his own machinery, but the arrangements avoid the high initial capital outlay and, frequently, the high unit costs involved in purchasing such items. Rental may be an attractive alternative to complete capital ownership by beginning families unable or unwilling to use large amounts of credit.

Exchange of machinery services between neighbors or exchange of labor for machine services is often used to reduce capital ownership requirements. Family arrangements frequently include such exchanges. They offer a good opportunity for a young man to trade his labor for the use of substantial amounts of capital.

An enterprise-share arrangement lies between conventional credit and conventional leasing arrangements. In most enterprise-share arrangements, the owner of a breeding or dairy herd makes the animals available for a specified share of the return. The young farmer furnishes feed and labor, and the owner furnishes the capital invested in the herd, and the two parties share the returns in proportion to the annual value of their contributions. The success of such an arrangement depends greatly upon the integrity of the two parties and retention of a mutual interest in the enterprise.

**Labor-share leases and father-son agreements.** In principle, these are similar. In father-son agreements, close kinship ties prevail in addition to the mutual interest in the farm business. The father may take a more active role than a farm owner would with a labor-share lease, and the son usually acquires an ownership interest in operating capital. In the labor-share lease, the young operator usually contributes only his labor and management, and so his share in the net income is in proportion to his contribution — namely, a labor share.

Labor-share leases are not intended to be permanent arrangements. They should be entered into with that understanding and with provisions for capital accumulation by the young operator toward an ownership share in the operating capital and eventual advancement to a partnership or to a full tenant status. Of major significance to beginning farm families is that labor-share leases require an adequate volume of business and managerial competence and confidence on the part of the young operator.

With high land prices and high levels of operating capital, the young man's labor and management contributions must be valued at rates comparable to those applied on land and capital. Once an estimate has been made of his share (see Table 13), it is easy to apply this percentage to an estimate of the income expected from the business that is to be divided between the two parties. The result is an estimate of the returns to the young family. It would be unwise for the family to enter into the agreement if this preliminary estimate indicates that the expected income will be unsatisfactory. Unsatisfactory income for the operator under a labor-share lease is more likely to result from an inadequate income to be divided than from an inequitable division

**Table 13. — An Example of a Young Farmer's "Labor-Share" in the Net Farm Returns Above Cash Expenses and Depreciation[a] on a 260-Acre Cornbelt Farm**

| Contributions | Owner | Operator |
|---|---|---|
| Land and improvements ($100,182 at 4%) | $4,007 | $..... |
| Machinery and equipment ($8,075 at 5%) | 404 | ..... |
| Inventory of livestock, feed, seed, and operating cash ($16,750 at 5%) | 838 | ..... |
| Labor and management (1.5 and 12 months at $250) | 375 | 3,000 |
| Total unpaid contributions | $5,624 | $3,000 |
| Percent contributed by each and therefore each party's share in the returns to land, capital, and unpaid labor and management | 65% | 35% |

[a] Depreciation on machinery, equipment, and buildings is treated as a cash expense. The owner is given a check from the undivided income to cover this amount.

of the income. The operator's income might be increased by expanding the area of land operated under the agreement, by expanding the volume of livestock, or by using another tenure status for the young operator in which his contribution and therefore his share of the earnings will be larger.

The problem of the managerial competence of the young operator arises when the volume of business in a contemplated labor-share agreement is adequate or better. How can a beginning farm operator develop managerial competence aside from an apprenticeship on the home farm? If the farm owner who offers a labor-share lease can work with the young man for a year or two the problem may be avoided, but the personal relationship between the two men may create another problem. Sometimes the success of a labor-share lease depends as much on the personalities of the two parties as upon the economic characteristics of the business.

An example from the Kentucky survey shows that under the influence of a benevolent owner, an ambitious and able tobacco-cropper tenant may make substantial and timely progress up the tenure ladder. This owner was influential in placing a substantial part of the cropper's share of a good tobacco crop in escrow as the basis for a later change in status. A similar amount from another good tobacco crop added to the first amount provided the equity financing needed to set up the cropper family on a farm of its own. Once they had achieved this, their ambitions and aspirations were lifted so that they more than met the challenge of the new opportunity.

**Problems created by tenure uncertainties.** Tenure uncertainties impose added credit risks for many farm families who make a start on land not owned by parents or other interested relatives. Those who start without an adequate amount of capital may be particularly vulnerable when tenure changes are imposed upon them. It may be more difficult for a beginning farm operator to rent high-priced land held by investment owners; but once such a tenancy is established and the young man's performance is acceptable, he is likely to enjoy a greater security of tenure than a similar young man on a farm that is being held for sale or is likely to change ownership.

The experiences of two beginning farmers in Nebraska illustrate this problem. One of these young men was renting the cropland in a 120-acre farm owned by a widow who occupied the residence on the farm. He felt that he could not afford to borrow money to invest in a complete line of farm machinery because the owner of the farm was planning either to resume operation upon her remarriage or else to

sell the farm, in which event the new owner would probably be the new operator or would bring in a tenant of his own choosing.

The other young Nebraska farmer was a crop-share tenant just entering his second year as a farm operator on a depleted 160-acre farm. His first corn crop made 26 bushels to the acre, while yields on neighboring farms ranged from 50 to 60 bushels. His livestock inventory the first year was 5 sows and gilts, 3 dairy cows, and 65 hens. His machinery inventory consisted of only 5 items — a tractor, a disk, a cultivator, a planter, and a feedgrinder — all bought the previous year as used equipment. He borrowed from or exchanged labor with neighbors and his father-in-law to meet the rest of his machinery needs.

When Lloyd (the second young farmer) and his wife began farming, they had a net-worth-to-debt ratio of 0.64 to 1.00 or for each dollar of indebtedness they had $1.64 worth of property. To get his small machinery and livestock inventory, Lloyd had borrowed $2,700 from the Farmers Home Administration.

He had only a one-year crop-share lease with no renewal clause. The landlord was over 70 years old, in poor health, and unwilling to spend money on fertilizer or other improvements.

In this setting, Lloyd was asked, "If someone offered to lend you $2,000 on a 5-year term at 6 percent interest, would you borrow it in addition to your indebtedness of $2,700, and if so, what would you do with the money?" Lloyd did not hesitate to say that he would borrow the money and that he would put it into more machinery. Were these answers wise?

Economists at the University of Nebraska pointed out that money spent on fertilizer on this farm would be most likely to bring the highest return per dollar spent. Crop yields were too low for efficient production. Added yields would also provide more feed for livestock.

The FHA supervisor, keeping in mind that there was little likelihood of getting Lloyd's landlord to share in fertilizer costs, suggested that Lloyd should use additional borrowed funds to finance more livestock, particularly more dairy cows. He pointed out the family's need for a regular flow of income to meet current living expenses. Also, the farm needed more land in standover grass and legumes to control erosion, and more roughage-consuming livestock were needed to produce an income from these crops. More livestock would also provide fuller employment for the labor on the farm; a 160-acre farm operated on a grain basis does not provide year-around employment. Lloyd's financial position did not permit him to remain relatively unemployed for any extended period.

In view of these alternatives, can Lloyd's response that he would invest additional money in machinery be justified? His tenure position determined his answer. He was in no position to buy land. His best chance of renting another farm, if he were to lose the one he was on, was to have sufficient equipment to give evidence of his ability to be an effective tenant operator. This was a prime consideration for Lloyd, as it was likely that the farm he was on would be sold to another operator when it passed into an estate.

Lloyd's experience is an excellent example of the problem many beginning farm families face in deciding how and where to use the limited capital available to them. All too frequently, the decisions may be guided unduly by personal uncertainties, by inadequate knowledge of alternatives, or by an unwillingness to forego immediate satisfactions. What steps could a lender suggest to Lloyd to improve his eligibility for additional credit?

Lloyd should try hard to improve his tenure position — to get a 2- or 3-year lease, or at least a continuation clause in the annual lease with not less than 6-months notice of termination.

He should try to clear away the tenure "block" to the use of fertilizers without adding to the risk he carries. A cash lease with reimbursement for carryover fertilizer would give Lloyd full return for every dollar he puts into annual applications of fertilizer, but it might impose additional risks of crop failures, price declines, etc.

He might plan a conservative expenditure for fertilizer on the highest-profit crops in the rotation. Check strips left in the fields might help to convince the landlord of the value of fertilizer applications.

Some money could go toward completing an inventory of basic items of machinery and equipment. Livestock expansion may have to be limited because animals capable of yielding an immediate return (dairy cows in milk) require a relatively high capital investment; young stock would mean a lower initial investment but also a delayed return and additional expense until production or sales begin. In addition, outlays for fences and other livestock improvements would add substantially to the capital required. Lloyd's managerial ability with livestock is unknown so that livestock returns may be too uncertain to justify the allocation of large amounts of limited capital.

Lloyd might be able to solve his winter employment problem by working for neighbors or taking part-time nonfarm work. But opportunities in either direction are not plentiful in Lloyd's location. He may also keep in mind the possibility of going back to nonfarm work entirely. Adjustment to urban employment might be easier than the sacrifices he and his family need to make to remain in farming.

## Keeping Initial Capital Requirements Down

We have already noted that operating capital requirements of the beginning farmer are relatively low or at minimum levels under particular tenure arrangements, including father-son agreements, labor-share leases, and enterprise-share arrangements. These arrangements do not reduce total farm capital investments, but shift part or all of the capital requirement from the operator to the landowner. Two other methods of minimizing initial capital requirements are arrangements that substitute labor for capital and arrangements that substitute smaller annual cash payments for the larger capital-ownership payments.

Exchanging labor for machine work, and buying young stock (such as bred heifers) and using labor to grow the added capital value of mature animals are forms of substituting labor for capital.

Substituting annual cash payments for ownership requirements includes the following:

1. Hiring some jobs done by custom operators.
2. Exchanging machine work with neighbors. (The extra use means larger repair and depreciation costs on the owned machinery.)
3. Joint ownership of high-cost machines. (This also means larger repair and depreciation costs.)
4. Using artificial insemination instead of owning a good bull.
5. Buying good used machinery instead of new. This point is illustrated by the extent to which 11 case-study beginning farmers reported that they bought used machinery and exchanged work and machines in an effort to keep down capital outlays during their early years in farming. They used an average of 20 items of machinery and equipment each during four years. Of the 20 items, 10 were bought used, 4 were bought new, 4 were borrowed or exchanged, and 2 were hired or rented. Their ways of obtaining specific items were as follows, in percent:

| | *Bought new* | *Bought used* | *Hired, borrowed, or exchanged* |
|---|---|---|---|
| Tractors | 33 | 67 | 0 |
| Plows | 31 | 54 | 15 |
| Disks | 45 | 55 | 0 |
| Planters | 27 | 55 | 18 |
| Mowers | 33 | 58 | 9 |
| Combines | 0 | 22 | 78 |
| Cornpickers | 9 | 36 | 55 |
| Balers | 0 | 10 | 90 |
| Wagons | 30 | 57 | 13 |
| Manure spreaders | 9 | 55 | 36 |

These beginning farmers evidently relied heavily on used machinery, and also hired, borrowed, or exchanged use of the larger, less frequently used machines.

## GETTING ESTABLISHED

Not all who start farming succeed in getting established as farm operators. Studies in Illinois indicate that 1 out of 5 young men making some kind of start in farming at the operator level fail to become established. A labor-share tenant, a tobacco cropper, a heavily indebted FHA borrower, or a low-equity buyer on a land contract may be considered as having started in farming but may be a long way from being established. Being established in farming implies a security of status usually associated with (1) adequate volume of business, (2) managerial control, (3) security of tenure, and (4) a controlling equity in the operating capital.

**An adequate volume of business** is one capable of yielding a net income large enough, at average levels of efficiency, to meet the family living needs and the requirements for capital accumulation and savings of a full-time farm operator. It should also provide full and efficient employment for the labor, capital, and management resources of the full-time farm-operating family. On rented land or under joint-operating agreements, these criteria must apply to the operator's share in the contributions to the farm business and his income from it.

**Managerial control** is essential to the self-employed status of a farm operator. A son who has only a minor voice in the management of a family-operated farm business would scarcely be considered an established farm operator.

**Security of tenure** on a farm of adequate size and income potential is essential to being established as an operator. Such security need not go beyond having a one-year lease with renewal privileges or with an automatic renewal clause. For an owner-operator, an encumbered owner, or a land-contract buyer, security of tenure depends on having sufficient equity in the land or protective clauses in the mortgage or contract to give assurance of at least a year's tenure in the future.

**A controlling equity** in an optimum inventory of farm operating capital is essential to continued and unimpaired tenure as a tenant operator or as an encumbered owner or land-contract buyer. An exception might be the labor-share operator who has managerial control and security of tenure on a farm with an adequate volume of

business. By the nature of his status, he would not own a controlling equity in the operating capital. It is questionable, however, whether an operator can be considered established in farming if his continued tenure depends solely on the extension or renewal of an operating agreement.

## LOOKING AHEAD

Each generation characteristically views the uncertainty of the future with concern and doubt, so there is nothing new in saying that the difficulty of getting established in farming will continue and that requirements for success will be greater in the future. On the other hand, young families who enjoy the competitive advantage of family-owned land and have access to an accumulation of capital from preceding generations in the family are scarcely aware that any difficulty now exists, to say nothing of any increase in difficulty, in starting in farming. Such economic differences will persist so long as we have the freedom now associated with owning private property.

The statements in this publication are based on the expectation that certain trends will continue. Four trends, clearly evident today, are likely to persist for some time and will influence the conditions under which young families enter farming. These are: (1) a continued increase in size of farm; (2) a continued increase in capital associated with one man's labor in agriculture; (3) further specialization in agricultural production; and (4) a growing complexity in managerial decisions required by commercial farming.

These trends are somewhat related and may have profound effects upon each other. For example, specialization in production could lead to a separation of livestock production from feed production. Highly specialized livestock enterprises might be conducted on relatively small acreages, while specialization in feed production might lead to still larger farms. Thus the interaction of two trends may at the same time contribute to the development of both larger and smaller farms. In each instance, however, capital used per man is likely to go higher.

The growing complexity of the management function will contribute to further specialization and to larger volumes of output per unit of operation. Scale economies, once associated primarily with the area of land in farms, are likely to apply increasingly to the cost of management and will push toward farm sizes and organizations with more units of output per manager. So far as this is accomplished within the framework of family-size farms, it may require higher levels of education and training among a relatively large number of

farm operators. Such better-trained operators will seek management returns more nearly comparable to their earning capacity in alternative lines of employment.

These developments suggest that in the future farm businesses may take on a life beyond that of the individual operator. Corporate forms of family ownership in which the management function is sufficiently separated from the ownership of land and capital may allow a transition of management from one generation to another within the same financial and tenure structure.

The family farm is likely to be the basic unit of economic organization within agriculture for some time to come. But it is likely to employ more capital and be more specialized in its function than the unit of organization now recognized as a family farm. Entering into farming at a managerial level within the framework of these farming units of the future may depend more on demonstration of personal ability than on the possession of given amounts of capital.

## SUMMARY

Getting established as a farm operator means more than getting started. It means achieving security of tenure on a farm with an adequate volume of business, exercising a major degree of managerial control, and owning a controlling equity in the farm-operating capital. As farms grow larger, more mechanized in operation, and more specialized in productive organization, the problem of getting started and getting established is largely one of meeting higher requirements in land, capital, and management. One-man farms may easily require a tenant investment, though not as net worth, of $15,000 for efficient utilization of labor, or a total investment, including real estate, of $50,000 or more.

Finding an adequate farm is a primary problem for young families, particularly for those without kinship ties to land. Most beginning farmers start either as tenants or in some operating agreement with their parents or other farm owners who are often close relatives. For this reason, the opportunities for new operators are closely associated with available family help. About 80 percent of all beginning farmers in this study received substantial family help.

Crop-share leases are popular with beginning farmers who do not have substantial family help. They are flexible with regard to size of the initial operation, allow an independent start with a minimum of initial capital, and, compared with livestock operations, place a limited managerial requirement on the young operator.

Some leasing arrangements make it possible for landlords to contribute part or all of the initial operating capital. Labor-share leases and father-son agreements, for example, require little or no capital from the beginning

farmer, but the number of opportunities for making a start by these means is very limited. Moreover, the young man's rate of progress from such a start depends heavily on volume of business and his managerial ability. The livestock-share lease allows the landlord to make greater contributions of both capital and management than he would probably otherwise make. In livestock areas such contributions may be important.

Any lease agreement for beginning farmers should encourage and allow an adequate volume of business, provide for an equitable division of costs and returns, and assure compensation for any unexhausted improvements that the young tenant may leave.

Part-time farming is a possible intermediate step toward full-time farming. It can minimize the amount of land and capital required for a start in farming as an owner-operator or part-owner, but progress toward full-time farming may be slow. Part-time farming can also easily become a permanent status because making the change from urban or off-farm employment to full-time farming is hard.

Buying land is an acceptable alternative to renting when security of tenure under a lease is a problem, when capital and credit resources permit buying enough land for efficient operation, and when buying will not impair the level of operational and improvement capital necessary for efficient operation. Some young farmers can get possession of farmland with minimum down payments by using land contracts. These are low-equity transfer devices. Some desirable provisions in such contracts include adequate length of repayment period, provision for prepayments, provision for converting the contract to mortgage financing, and an adequate grace period before default procedures may be initiated.

For beginning farm families, savings, gifts and inheritances, borrowings (including the use of family-owned machinery and equipment), and leasing and contractural arrangements constitute the sources of farm operating capital. These families are generally inexperienced in the use of credit, depend heavily on family sources of credit or credit backing, and particularly need intermediate-term credit. Uncertainty concerning their own ability to use borrowed capital causes some young farmers to restrict their use of credit.

The amount of capital these families need for making a start can be minimized in three ways — by shifting capital requirements to the land owner through appropriate tenure arrangements, by substituting labor for capital, and by substituting smaller annual cash payments for larger capital investments.

Four trends likely to characterize farming in the near future are: (1) larger and fewer farms; (2) more capital associated with one man's labor; (3) further specialization in agricultural production; and (4) a growing complexity of managerial functions in agriculture.